

Katcha et al.

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In the Specification

Amend paragraph [0025] as follows:

[0025] Referring to Figs. 3 and 4, a computed tomography (CT) imaging system 14 is shown as including a rotatable gantry 15 representative of a "third generation" CT scanner. Gantry 15 is positioned in a gantry support 16 and has an x-ray tube 17 that projects a beam of x-rays 18 toward a detector array 19 on the opposite side of the gantry 15. Gantry 15 is designed to rotate and, as such, is defined as a rotating side whereas support 16 does not rotate and, as such, is defined as a stationary side. A slip ring (not shown) is positioned proximate to a rotating base (not shown) for transference of current to x-ray generator components that rotate during data acquisition. The rotating base is designed to support x-ray tube 17, a high voltage (HV) tank (not shown), and other auxiliary components (not shown) during rotation around a medical patient 22. As will be described in greater detail below, the slip ring is constructed to transfer power received from a stationary inverter (not shown) in the gantry support or base to the HV tank so that a voltage potential can be applied to the x-ray tube 17. One skilled in the art will appreciate that the present invention is also applicable to the projection and detection of gamma rays and other HF electromagnetic energy.

Amend paragraph [0031] as follows:

[0031] Slip ring 56 has a relatively large diameter and therefore can behave as a radiating antenna. Therefore, in order to minimize electromagnetic radiation, it is imperative to limit frequency content of the current and voltage waveforms on the slip ring. To this end, as shown in Fig. 6, the present invention includes an inverter topology to limit frequency content of the waveforms transferred on the slip ring. Inverter 60 includes a pair of resonant circuits 62. Each resonant circuit includes a series connected capacitor, C, and inductor, L. Each resonant circuit 62 is connected to an output of a plurality of power switches 64 arranged in an H-configuration. The power switches may include MOSFETs, IGBTs, and the like. The power switches 64 are designed to receive a high voltage DC input, such as 650 V DC, and generate an AC voltage at a variable frequency, i.e. approximately 20 - 100 kHz.